

# **Joint Legislative Committee on Vocational and Technological Education**

## ***Final Report***

2003

Accession number: LSC03\_2

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**JOINT LEGISLATIVE  
COMMITTEE ON  
VOCATIONAL  
AND TECHNOLOGICAL  
EDUCATION**

**FINAL REPORT**

**2003**

# **JOINT LEGISLATIVE COMMITTEE ON VOCATIONAL AND TECHNOLOGICAL EDUCATION FINAL REPORT**

## **AUTHORITY AND PURPOSE:**

The Joint Legislative Committee on Vocational and Technological Education was enacted by the Forty-sixth Legislature, First Regular Session (2003), Chapter 103. The purpose of the Committee is to study:

1. The feasibility and cost of adding two credit hours of vocational and technological education to the minimum course of study for high school graduation;
2. All funding sources available for vocational and technological education and the timeframe to access such sources;
3. The effect on the school day of pupils participating in vocational and technological education programs;
4. The effect of vocational and technological education programs on similar community college programs, including dual enrollment, and how, if appropriate, school districts and community colleges determine average daily membership and full-time student equivalent student for pupils participating in such programs;
5. The different models for delivering vocational and technological education programs and the relative efficiency of each model;
6. The benefits to students in vocational and technological education programs;
7. The number and type of vocational and technological courses currently being offered in urban districts and in rural districts;
8. Whether high school counselors encourage students to participate in vocational and technological education courses;
9. Current business partnerships with high schools regarding vocational and technological education.

## **MEMBERSHIP:**

**House** Two members of the House of Representatives, from different political parties and one designated as Co-Chair, appointed by the Speaker of the House of Representatives:  
**Rep. Linda Gray (Co-Chair), Rep. Cajero Bedford**

**Senate** Two members of the Senate, from different political parties and one designated as Co-Chair, appointed by the President of the Senate:  
**Senator Leff (Co-Chair), Senator Miranda**

**Other** One member of an urban school district governing board in a district that offers vocational and technological education, appointed by the President of the Senate:  
**Mr. Keith Crandell, Mesa School District Governing Board**

The Superintendent of Public Instruction or Superintendent's designee:  
**Mr. Milt Ericksen, Deputy Associate Superintendent of Vocational and Technological Education**

One president of a community college in an urban community college district that offers vocational and technological education, appointed by the President of the Senate:

**Dr. Gene Giovannini, President, Gateway Community College**

One representative of a school district that participates in a joint technological education district, appointed by the President of the Senate:

**Mr. Marv Lamer, Superintendent Valley Academy for Career and Technology**

One president of a community college in a rural community college district that offers vocational and technological education, appointed by the President of the Senate:

**Dr. Gary Passer, President, Northland Pioneer College, Navajo County**

One member of the business community, appointed by the President of the Senate:

**Ms. Michelle Rill, Greater Phoenix Chamber of Commerce**

One representative of the State Board of Education, appointed by the Speaker of the House of Representatives:

**Dr. Matthew Diethelm, VocTech District Program Administrator**

One representative of the Governor's office, appointed by the Governor:

**Not appointed**

One member who is a principal of a rural school that offers vocational and technological education, appointed by the Speaker of the House of Representatives:

**Mr. Ken Van Winkle, Principal, Show Low High School**

One parent who is interested in vocational and technological education, appointed by the Speaker of the House of Representatives:

**Mr. Richard Hein, Parent, Tucson**

One school district program administrator for vocational and technological education, appointed by the Speaker of the House of Representatives:

**Mr. Gregory Donovan, President, West-MEC**

### **ACTIVITY**

The Committee held two meetings this year: October 7, 2003 and December 2, 2003.

Discussion in the October 7, 2003 meeting focused on current vocational and technological education programs in Arizona. The Committee heard presentations from the Northern Arizona Vocational Institute of Technology, the Arizona Department of Education, Tucson Unified School District, the Arizona Tax Research Association and Maricopa Community Colleges. The Committee also heard public testimony.

Discussion in the December 2, 2003 meeting focused on the development of Committee recommendations. The Committee heard presentations from the Arizona Board of Regents and the Arizona Department of Education. The Committee also heard public testimony.

**COMMITTEE RECOMMENDATIONS:**

1. The Committee recommends the State Board of Education change its minimum course of study and competency requirements for graduation from high school to require all high school students to take a vocational education credit as part of their 8 ½ credit electives requirement.
2. The Committee recommends that the Arizona Board of Regents amend their policy to accept vocational course credits to be accepted by the Board.
3. The Committee recommends to leadership that the Committee be extended for one more year.

## ATTACHMENTS

- Attachment 1      Agenda from Tuesday, October 7, 2003  
Attachment 2      Minutes from Tuesday, October 7, 2003  
Attachment 3      Laws 2003, Chapter 103 (HB 2001)  
Attachment 4      *Arizona Career Technical Education Delivery System Project Report, April 1, 2003*, Arizona Department of Education—Copies of the report may be obtained by contacting the Arizona Department of Education, Career and Technical Education Division  
  
Attachment 5      *FY 2004 CTE Program List*, Arizona Department of Education  
Attachment 6      *Career and Technical Education, 2002 Data Snapshot*  
Attachment 7      Federal, State, Local and County Revenues  
Attachment 8      *State Board of Education Rules regarding Arizona High School Graduation Requirements*  
  
Attachment 9      *Arizona's Joint Technological Education School Districts*  
Attachment 10      Agenda from Tuesday, December 2, 2003  
Attachment 11      Minutes from Tuesday, December 2, 2003  
Attachment 12      *Prison Program Helps Women Cook Up New Life*  
Attachment 13      *CTE Recommendations to HB 2001 Study Committee*  
Attachment 14      *There are a million reasons a high school student should go to EVIT...*a brochure produced by the East Valley Institute of Technology—Copies may be obtained by contacting the East Valley Institute of Technology at [www.evite.com](http://www.evite.com) or with the Chief Clerk of the Arizona House of Representatives  
  
Attachment 15      *Joint Legislative Committee on Vocational and Technological Education Possible Recommendations*

# **ARIZONA STATE LEGISLATURE**

## Joint Interim Meeting Notice

**Open to the Public**

### **JOINT LEGISLATIVE COMMITTEE ON VOCATIONAL AND TECHNOLOGICAL EDUCATION**

**DATE: TUESDAY, OCTOBER 7, 2003**

**TIME: 10:00 A.M.**

**PLACE: HOUSE HEARING ROOM 3**

- AGENDA:**
1. Call to order
  2. Introduction and Opening Comments
  3. Presentation on current programs:
    - a. Review current models of delivery
    - b. Benefits to students
    - c. Course enrollments
    - d. Business partnerships for courses offered
    - e. Effect of courses on school day
  4. Presentations by the Department of Education:
    - a. Funding and access
    - b. Number and type of courses offered
    - c. Feasibility and cost of increasing minimum course of study
  5. Presentation on effect of vocational education courses on similar community college programs:
    - a. Dual enrollment
    - b. Funding
  6. Discussion
  7. Public Testimony
  8. Adjourn

**MEMBERS:**

Senator Leff, Cochair

Senator R. Miranda

Representative L. Gray, Cochair

Representative Cajero Bedford

Keith Crandell, Member, urban school district governing board

Dr. Matthew A. Diethelm, representing AZ State Board of Education

Gregory Donovan, school district program administrator for voc-tech

Milt Ericksen, Superintendent's designee

Dr. Gene Giovannini, President Gateway Community College, representing urban community colleges offering voc-tech

Richard Hein, Parent interested in voc-tech

Dr. Marv Lamer, district participating in a joint technological education district

Dr. Gary Passer, President, Northland Pioneer College, representing rural community colleges offering voc-tech

Michelle Rill, Gr. Phoenix Chamber of Commerce, representing the business community

Ken Van Winkle, Principal, Show Low High School, representing rural schools offering voc-tech

Vacant, Governor's appointee

ga 2/12/2004

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ARIZONA STATE LEGISLATURE  
Forty-sixth Legislature – First Regular Session

JOINT LEGISLATIVE COMMITTEE ON  
VOCATIONAL AND TECHNOLOGICAL EDUCATION

Minutes of Meeting  
Tuesday, October 7, 2003  
House Hearing Room 3 -- 10:00 a.m.

Chairman Gray called the meeting to order at 10:05 a.m. and attendance was noted by the secretary.

**Members Present**

Senator Miranda  
Senator Leff, Cochair  
Keith Crandell  
Dr. Matthew A. Diethelm  
Gregory Donovan  
Dr. Gene Giovannini  
Richard Hein

Representative Cajero Bedford  
Representative L. Gray, Cochair  
Dr. Marv Lamer  
Dr. Gary Passer  
Michelle Rill  
Ken Van Winkle

**Members Absent**

Milt Ericksen

**Speakers Present**

Brian Lockery, Majority Research Analyst, House Education Committee  
Chester Crandell, Superintendent, Northern Arizona Vocational Institute of Technology  
Helen Bootsma, Arizona Department of Education  
Dr. Linda Loomis, Director/Administrator of Career and Technical Programs, Tucson Unified School District  
Michael Hunter, Vice President, Arizona Tax Research Association  
Karlene Darby, Education Program Director, Arizona Department of Education  
Jack Lunsford, representing Maricopa Community Colleges

**Introduction and Opening Comments**

The Members introduced themselves and related their interest in vocational education.

Chairman Gray thanked everyone for arranging their schedules to attend the meeting, noting that it was challenging to get everyone together.



Brian Lockery, Majority Research Analyst, House Education Committee, advised that the Committee was established by a strike-everything amendment adopted to H.B. 2001, vocational education; study committee (Laws of 2003, Chapter 103) and related the Committee charge (Attachment 1).

Senator Leff commented that the task of the Committee is too extensive to be completed by December 2003. Chairman Gray stated that the time was shortened because of the additional 58 days of Session. She related that a conference on career and technical education (CTE) was held in Tucson where participants were provided with copies of the *Arizona Career Technical Education Delivery System Project Report*, which should be helpful to the Members (Attachment 2). She pointed out the report indicates that high school students in CTE programs scored two points higher than other students on Arizona's Instrument to Measure Standards (AIMS) tests. She added that an extension may be necessary for the Committee to complete the charge.

### Presentations on Current Programs

Mr. Van Winkle, referring to the Northern Arizona Vocational Institute of Technology (NAVIT) district, stated that freshmen in almost all high schools are required to take a career pathway/career exploration-type course in order to be exposed to different vocational courses. Students learn Level I skills (basic computer training and keyboarding) in junior high. Many Level II and III courses are taught on the high school campus. Level II are career pathway/exploration courses such as beginning auto, beginning woodworking, etc. Level III courses are the higher level such as advanced auto. He said the Cisco Networking Academy Program is not offered at NAVIT, but at individual high schools. Through NAVIT, students are taught in a building purchased by NAVIT or on the Northland Pioneer College mini-campus. Courses include fire science, nursing, cosmetology, and welding. Many students are interested in taking the courses taught on campus by teachers at the various high schools and off campus taught by professionals. There is much opportunity for students in the area to be exposed to many vocational courses.

Chairman Gray questioned when students learn about the options available in high school. Mr. Crandell replied that discussions about careers begin in elementary school, and then more specifically, junior high. The East Valley Institute of Technology (EVIT) and NAVIT conduct tours so sophomores and freshmen can see what programs are available and link those with the Level I and II programs at their school in anticipation of attending EVIT for Level III programs. EVIT has about 40 separate programs that give students a stepping stone into the workforce or a pre-baccalaureate program with the junior college. EVIT is tied in with Maricopa Community College and NAVIT is tied in with Northland Pioneer College.

Chester Crandell, Superintendent, Northern Arizona Vocational Institute of Technology, indicated to Senator Leff that NAVIT offers eight courses in the central program where students leave the home campus to attend classes at the community college. With the Level III programs offered at the high school and what NAVIT offers, there are approximately 40 different programs. Some of the central programs at the community college are advanced welding, certified nursing assistant, health-related occupations, cosmetology, nail technician, industrial maintenance, and photo imaging. Some high schools offer vocational agriculture and

administrative services information. He added that the intent is to basically fill in the gaps of home high schools by providing programs that may be too expensive to offer, or there may not be enough students for a viable program so students are brought in from 11 different districts, etc.

Mrs. Leff questioned if the programs prepare students to enter the technology field and work at manufacturing plants. Mr. C. Crandell pointed out that the programs offered are governed by state funding guidelines. Chip manufacturing, etc., is not funded so students are not pushed at the high school level for that kind of training. The Cisco Networking Academy Program, which is an up-and-coming field, is used where it is viable, and A+ certifications for working on computers have been included. He acknowledged that private funding is accepted by EVIT and NAVIT. EVIT formed partnerships with businesses to fund some training programs, but since industries in the NAVIT area are not viable, partnerships have not been pursued.

Helen Bootsma, Arizona Department of Education (ADE), testified that every two years she is responsible for conducting a research project using labor market information for positions through grade 14 (or the Associate of Arts [AA] degree) to compile a priority program list for funding that reflects projected job openings in Arizona. The most recent projected labor market information was until 2010 and included job openings and wages, as well as technology and academic factors. Based on the information that was gathered, a list was prepared for school districts prioritizing 30 programs that can be offered in the state (Attachment 3). Each is preparatory, so students leave Level III programs with specific occupational skills to be successful in the workforce. More importantly, students are motivated and have a clear focus for continuing on in the community college to complete an AA degree.

Ms. Bootsma clarified for Senator Leff that state and national labor market statistics were so closely aligned that Arizona labor market statistics were used. She said she works with the Arizona Department of Economic Security (DES), the state designated collector of labor market information, to develop the list. Each school district decides which programs from the list can be offered based on the labor market needs of the community, what is available at the community college, student interest level, etc. She pointed out that the programs highlighted in blue were most recently revised to reflect new jobs on the market, since it is very important not to offer only traditional CTE programs. Referring to Recommendation #4 to proceed with technical assessments for each of the programs (Attachment 2), she advised that assessments are currently being identified.

Chairman Gray noted that there are a number of technological programs in the East Valley. Ms. Bootsma responded that many school districts have partnerships with local business and industry, depending on what is available. Referring to the program list, she advised Ms. Cajero Bedford that the top third programs receive more money than the middle third, and the bottom third receive somewhat less funding.

In response to a query by Chairman Gray, Ms. Bootsma speculated that every school district (except maybe a few charter schools) offers some CTE programs, but the depth and breadth depends on the size of the school district. One of the smallest, Young, offers only one CTE program.

Mr. Hein questioned how students can be prepared if vocational education is not available, for example, at the Saguaro High School in Tucson. Ms. Bootsma commented that an incredible amount of district and site support is necessary for a successful CTE program and suggested that perhaps marketing is needed. She added that the business community would like a higher skilled workforce and business people are excited about partnering with education, but it is expensive.

Mr. Donovan remarked that most school board members and business people support CTE wholeheartedly. He recalled that schools districts used to have a burgeoning amount of industrial arts, business education, home economics, etc., but the Arizona Board of Regents (ABOR) increased university entrance requirements so a good portion of the elective process, the arts and vocational education, was eliminated. In addition, technology started moving very quickly while budgets continued to be constrained, making it difficult for a shop teacher, for example, to update equipment, etc. He indicated that the Peoria School District moved to a block schedule so there is an opportunity to earn 32 credits over four years. The elective system has burgeoned again, not exclusively CTE, but also the arts and similar courses, so the Peoria School District did something to well round the students.

Mr. Hein commented that the principal in Tucson planned to eliminate the automotive program, but \$70,000 was found to extend the program. He submitted that Arizona should be made into a great technology state like Ohio.

Ms. Bootsma encouraged the Members to read the report on best practices across the United States (Attachment 2), noting that one of the goals is to make significant changes in the delivery of CTE in Arizona. Referring to page 139, she pointed out the recommendation to investigate the block-scheduling approach mentioned by Mr. Donovan. She added that the report shows that students who are focused in high school and take CTE courses tend not to drop out so quickly (page 60).

Dr. Linda Loomis, Director/Administrator of Career and Technical Programs, Tucson Unified School District (TUSD), apprised the Members that 8,000 students take CTE courses in the comprehensive high school system. Students need to be prepared for the academic rigor of college, but also need career skills, so those are blended.

Senator Leff remarked that when she attended school, students were either college bound or took the vocational track. Across the country, everyone has gotten away from that to believing every student should attend traditional college, which does not work for everybody and is probably why so many students drop out. She wondered if students and parents will ever again be given the choice of allowing the student to pursue a technical education rather than having to fit the courses into the academic track.

Dr. Loomis said that is done in TUSD and the majority of school districts across Arizona. Most information technology industries have come on-line with Cisco, which is a very vigorous two-year program that equips students to enter the workforce earning \$35,000. The A+ computer maintenance and repair programs are not quite as rigorous, but students earn national certification and can immediately enter the workplace. Additionally, students receive certification to enter the workplace in the certified nursing assistant program.

Senator Leff asked why Dr. Loomis' comments conflict with those made by Mr. Hein. Dr. Loomis replied that she takes exception to his comments about Saguaro, which is one of the schools she works with that has 12 dynamic CTE programs the parents, children, and administrators are highly excited about.

Dr. Lamer surmised that there is still a huge void in state funding other than that offered by Joint Technical Education Districts (JTEDs) since it is limited to Level II and III programs; therefore, it is not clear what should be done to prepare 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup> grade students where the programs are basically dependent upon the same maintenance and operations resources as English, math, and social studies.

Chairman Gray asked if TUSD could form a technological district under the present tax scenario.

Michael Hunter, Vice President, Arizona Tax Research Association (ATRA), advised that secondary property taxes would be collected so the levy limits and constitutional cap would not apply. The big question would be whether the voters would be interested. A secondary tax on the ballot in Pima County for a community college district override recently failed, and there are still serious tax rate issues going on in TUSD.

Chairman Gray pondered whether it would be helpful to revamp the desegregation tax that pushed the district over the limit and move that under VoTech.

Mr. K. Crandell related to Ms. Cajero Bedford that for every JTED that is formed, the voters of the district must approve a five-cent per \$100 assessed valuation qualifying tax rate (QTR). The difference between the QTR and whatever is generated by Average Daily Membership (ADM) for that district is picked up by the state general fund. At EVIT, for the courses that are dual enrollment in which the student receives high school and community college district credit, tuition is paid, but it is much less than regular tuition. In other courses, personal use items sometimes must be purchased such as uniforms, cosmetology kits, etc., but no tuition is paid.

When Ms. Cajero Bedford expressed the need to provide more money to the high schools, Mr. K. Crandell stated that it can be done two ways. Most of the JTEDs in existence in Arizona have only satellite courses, for example, vocational courses taught at Show Low High School by teachers from the school, so the school draws ADM funding for that class over and above regular ADM. Also, additional ADM is generated for programs taught at EVIT or NAVIT central campuses because those courses are sponsored by the JTED.

#### Presentations by the Department of Education

Karlene Darby, Education Program Director, Arizona Department of Education, noted that Milt Erickson is in Washington, D.C. attending a meeting, and the Management Information Systems person, Ted Davis, is in the State of Washington for a conference; however, she and Ms. Bootsma will attempt to answer questions or find the answer. She stated that her role at ADE is to oversee federal funding, which is distributed to the school districts. The two types of funding are federal (Carl Perkins vocational funding), which is the larger amount, and state, which is referred to as block grant funding, and is a small amount. She acknowledged to

Mr. Hein that this is the last year for Carl Perkins funding, but reauthorization discussions are currently going on.

Ms. Darby referred to a handout, *2002 Data Snapshot* (Attachment 4) and explained that ADE is required to collect data from school districts to determine how funds are spent, etc., which is compiled by ADE and reported to the federal government in a consolidated annual report. She brought up the fact that 65 percent of the CTE concentrators who took the AIMS reading and writing tests met or exceeded the standard compared to 63 percent of non-CTE students on reading and 61 percent of non-CTE students on writing. She related that her son took the Cisco program at Greenway High School. He is currently a student at the University of Puget Sound with a part-time job that he primarily obtained because of the Cisco course, which helps her out in terms of paying tuition.

Ms. Darby advised Chairman Gray that an AIMS math score is not required for students until 2006, and therefore, was not included in the data collection, but will eventually be added. She reviewed a handout relating to federal and state funding (Attachment 5).

Chairman Gray commented that administration costs for 32 full-time equivalents (FTE) is more than 10 percent of the total amount of state funding. Ms. Darby answered that certain restrictions apply and she will obtain more particulars. She noted that there is a five-percent cap on administration for the federal funds.

Ms. Darby indicated that she provided a list of all vocational programs and courses offered in urban and rural districts, which is quite lengthy.

Regarding the feasibility and cost of increasing the minimum course of study, she related that School Finance staff is currently reviewing the issue, so she will provide additional information later.

When Senator Leff asked how much funding every school receives, Ms. Darby responded that she does not know about state funding, but federal funding is based on the number of students in poverty in each district. Young, which is a tiny district, only has one vocational program and receives between \$2,000 and \$3,000, so it is not much, and the related paperwork is another issue. She noted that these funds are supposed to supplement what the local school district provides and are not the only source. Phoenix Union High School District received approximately \$2.5 million in federal funding last year for 13 high schools, some of which have more vocational programs than others, so it is up to the school district how the funds are parceled out. Phoenix Union will receive more this year because of changes in the census data.

Dr. Loomis conveyed that TUSD has 62,000 children in K-12, and CTE programs exist in the 20 middle schools and 11 high schools. Only high school numbers are reported to the state, i.e., 8,000 students are involved in CTE. TUSD received \$1.5 million in federal funds and \$500,000 from the state, which is about all the schools receive due to budget constraints. Out of the 11 high schools, two are very small and only receive about \$28,000.

Ms. Cajero Bedford remarked that her goal is to add two more credits for high school students across the state except those who are college bound, and address cost because there was some

concern raised about how Snowflake, Pinetop, etc., would handle the financial aspect when the original bill was heard.

Dr. Loomis said she understands virtually every school district has CTE, and if there are only a few CTE courses, the school district can link with the local community college. In TUSD, there are 22 different CTE programs, and it is not an unfunded mandate to have two Carnegie units of credit that are required because five electives for high school graduation are required. Rather than taking five electives from a menu, such as art, physical education, band, etc., this would say that CTE is so important to the future of the workforce and economy that all students would take two Carnegie credits. She added that many of the CTE courses in the high school curriculum are basically good education, i.e., business and marketing, very global, colorful skills that will take a student anywhere.

Dr. Loomis spoke about her daughter who took four years of business and marketing in high school, was involved in cooperative education, the DECCA program, and finished high school in the top 10 of her class. She attended the University of Arizona and knew exactly what she wanted to major in because she had those skills set in CTE. She knew all about herself, could speak publicly, knew work ethics, concepts and business principles, etc. In four years, she graduated with a baccalaureate degree in advertising and now works at Macy's in the Advertising Department in Union Square. She is a good example of what CTE does for some students. There are many different scenarios for youth, but the important thing is to obtain the foundation in high school.

Senator Leff asked if the intent is to require CTE for the two required credits as opposed to other electives. Ms. Cajero Bedford agreed, noting that there is an opportunity for students to take more courses, but they are not, so they could spend the time in CTE.

Dr. Loomis stated that there is a set of required courses, but school districts can add others. For example, TUSD requires driver's education, health, and two credits in physical education. Those and economics were taken away years ago by the state minimum requirements for high school graduation so TUSD now has about five elective credits for high school graduation at the choice of the student.

Senator Leff remarked that if the intent is to require that two of the five credits are in CTE, she would not like to see the Committee make such a recommendation rather than a recommendation of fully funding opportunities for people to be prepared for a career path, especially those who may not go to college. Students who cannot afford to go to college or do not wish to are the ones she would like to fully fund and concentrate on obtaining strong work-related and vocational skills.

Mr. Diethelm conveyed that in other discussions, one idea that has been strong is that every student needs some form of CTE. Even straight A students who go to college need fundamental workplace skills. He clarified that the current requirement for high school graduation is one credit hour, but it is either fine arts or CTE at the student's choice. Speaking in a general sense for the Arizona State Board of Education, he speculated that a broader option would be acceptable.

In response to a query from Chairman Gray about how Peoria students meet credit requirements with the block schedule, Mr. Donovan related that the block schedule allows students to take courses in 90-minute segments rather than 55, which, over the course of the semester, meets the minimum instructional time required. Courses are offered in semesters like a college in order to earn eight Carnegie credits per year rather than six. He pointed out that the State Board has a rule of one CTE or fine arts credit, but the ABOR decided to only accept the fine arts credit, so from the standpoint of graduating from high school to enter the state university system, there is no benefit to a high school student to take a CTE course.

Senator Leff wondered if the ABOR perceives the term *vocational education* differently and stated that she would like to hear from ABOR at the next meeting.

Ms. Cajero Bedford clarified that the bill was meant to address students not going on to college in hopes the students would remain in school, so the two credit hours would be added.

Mr. Donovan stated that he is a staunch supporter of CTE, but concerned since there are currently 21 credit opportunities in the high school system, which is not inclusive of mandatory CTE, and if two are added, there would be 23 out of 24 mandates to a high school. He is not sure what that means for the lower 50 percent or how many students would be pushed in the wrong direction.

Mr. K. Crandell remarked that many CTE courses would qualify for a science or math credit, etc., so it is important to attempt to equate and make sure the courses that are required fill vocational technical requirements. A student taking electronics or air conditioning courses must have a good understanding of science and math, and students in medical courses could qualify for science credits.

Ms. Bootsma clarified that school districts would have the authority to make those decisions.

Mr. Lamer surmised that state regulations on graduation requirements would help, which call for a flexibility of 3.5 credits that could cross over as vocational credits and be applied in a certain format for an English or math credit with some limitations (Attachment 6).

When Mr. Hein asked how many JTEDs are in Arizona, a list was provided to the Members (Attachment 7).

Dr. Passer revealed that in listening to the discussion, he was reminded of research conducted by the Department of Education in the State of Iowa in 1990, which concluded that 80 percent of funds spent in education in the state benefited 15 percent of the total student body that actually graduated with baccalaureate degrees, and there has not been much change since.

He stated that he is supportive of any improvement to vocational education in the K-12 system, but if school districts make Level I, II and III courses in vocational education available, and if it is true that the majority of those participants are not fully prepared for the workforce at least at a skill level, then Level IV vocational programming would be expected at the community college level, which may take one or two years. Add to that the fact that workforce experts believe 80 percent plus new jobs created in the United States today require more than a high school

diploma, but less than a baccalaureate degree. This means most of the high school graduates and adults finding themselves displaced from the workforce will return to or attend community colleges in vocational programs for the first time. It is incumbent upon the community college system to: 1) avoid unnecessary duplication in vocational training wherever possible and; 2) streamline and make the training program from high school to a community college and placement into work as seamless as possible. In fact, it is part of the community colleges' responsibility in accepting Perkins funds to establish linkages with secondary school vocational programs.

Dr. Passer related that, nationally, the most common demonstration of linkages between community college vocational programs and secondary programs is dual enrollment, which avoids unnecessary duplication and makes the transition from high school to community college as seamless as possible. The intent is for high school students to be enrolled in vocational courses preparatory in nature that fit in as a program requirement with the community college program and earn college credit.

Senator Leff stated that the issue with the budget was if the community college should receive full funding when high school buildings and teachers are used, and whether the same student is doubly funded.

Dr. Passer asked that sufficient time be allowed to address the issue since each school district addresses funding differently and it is not easy to describe.

Jack Lunsford, representing Maricopa Community Colleges, conveyed that the issue of dual enrollment has been discussed for several years, but he believes there has been clarification in terms of when the funding takes place. The statute calls for four credits to be funded at the K-12 level, and after that is met, if the student is on campus any longer, no additional funding is received. If the student is enrolled in dual enrollment courses beyond the four credits, the community college district incurs costs and claims state aid for that full-time student equivalent (FTSE), which is an audited number as prescribed by legislation sponsored by Chairman Gray.

He noted that two exceptions are 1) juniors and seniors, particularly seniors who do not need to be on campus full-time for four credits, state aid can be obtained if the student is involved in dual enrollment and still within the four hours for the high school, and; 2) if there are written criteria of why a waiver should be allowed and it is capped at 25 percent, freshmen and sophomores can also enroll in dual enrollment courses, but must meet the four-credit test in the high school before the community college can claim state aid.

Dr. Passer explained to Chairman Gray that a student enrolled through NAVIT who attends class at Northland Pioneer campus taught by college faculty is enrolled in a college program so it is not dual enrollment. The college receives a FTSE for the student and NAVIT also receives funding. The cost of the vocational program is exorbitantly high, but is shared equally between NAVIT and the community college.

Chairman Gray stated that the taxpayer is paying NAVIT and the community college for that one student, which is where dual payment comes into play because funding is provided twice for that specific program for one student.



Mr. C. Crandell informed the Members that A.R.S. Section 15-789 allows high schools to partner with community colleges to offer vocational services, but does not address who shares what costs. He said NAVIT could not build a facility because of the assessed valuation and the fact that the district covers 11 different districts over 13,000 square miles. By partnering with Northland Pioneer College, there are centers in almost every district NAVIT works in, so NAVIT takes the ADM that is received and shares the cost of offering the programs that cannot be offered at the high schools due to the number of students or the cost of the program. He believes this is concurrent enrollment because the courses are taught by community college faculty in community college facilities. The cost is shared because buildings were erected, equipment purchased, etc., which expanded the offerings, not only for high school students, but also for every adult in those areas. He added that a welding program in Show Low was previously not offered to adults because of lack of facilities, but now there is an adult class three nights per week, and those classes are full. By pooling money, more programs can be offered.

Senator Leff questioned if the definition of *dual enrollment* applies if the teacher from the high school teaches.

Dr. Passer acknowledged that the students are probably doubly funded, which may be warranted in the context of the Committee's discussion of how inadequate vocational education is. He added that these courses provide not only the opportunity where there is none, especially in rural areas, but allow high school students to leave high school with one or two years of college, perhaps a certificate or degree, job prepared, and thus they become taxpayers.

Mr. Lockery advised that prior to 2003, regulations referring to dual enrollment were found in the State Board of Directors for Community College rules, but as part of removing the State Board, many of those rules were transferred to statute (Title 15, Section 18-2101). Dual enrollment is not actually defined in statute in the normal fashion, but sort of referred to as authorized courses that take place based on what is offered through Section 18-2101. He believes it states that the course is taught by a high school teacher on a high school campus during regular school hours.

Ms. Cajero Bedford noted that cost was a major issue in high schools, but she has brochures of many classes that are not expensive to implement, such as accounting and law enforcement.

Dr. Loomis remarked that most schools in the state offer CTE programs. Improvements can always be made so there is a constant review process. There is not enough funding, but TUSD is doing a good job with what is available. Each of the 22 programs at TUSD go through a cycle of review to determine which need to be upgraded, and that is done through the Carl Perkins guidelines to retain programs in line with what the workforce wants, and keep labs and faculty members current.

She added that Tucson does not have an EVIT system. When the concept was studied for Tucson application, it became apparent that many of the EVIT programs were serving 6 percent of the juniors and seniors going to another district or EVIT to access quality programs, when about 40 percent of students need to have a skill. TUSD is able to provide more access and opportunity in a comprehensive high school setting than a JTED.

Ms. Cajero Bedford explained that she introduced legislation because of the high dropout rate of high school students. A recent figure she saw of the percentage of 9<sup>th</sup> graders that are not expected to finish was astounding.

Chairman Gray remarked that she believes VoTech courses would keep students in school if the students knew what could be achieved.

Ms. Darby expressed concern that the discussion of dual enrollment may negatively impact people's opinion of the overall value and importance of vocational education. She related that she has a study recently received from the State of Washington that is available on its web site in which the following questions and answers were included:

Q: Should secondary schools offer high school students vocational training in addition to academic skills?

A: Yes. Secondary schools should offer students vocational training because many students work after graduation. Many employers hire workers with only a high school diploma and want various workers to have job-specific skills and general workplace skills.

Q: Is secondary CTE a cost-effective program?

A: Yes, secondary CTE boosts student employment and earnings and generates tax revenues that far exceed the cost of the program.

Chairman Gray indicated that Dr. Giovannini's presentation will be postponed until the next meeting, which will be scheduled around the Special Session beginning on October 20, 2003. She added that she appreciates everyone's attention and comments.

Without objection, the meeting adjourned at 12:20 p.m.

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Linda Taylor, Committee Secretary  
October 10, 2003

(Original minutes, attachments, and tapes are on file in the Office of the Chief Clerk.)

**Senate Engrossed House Bill**

**State of Arizona  
House of Representatives  
Forty-sixth Legislature  
First Regular Session  
2003**

**CHAPTER 103**

**HOUSE BILL 2001**

**AN ACT**

**ESTABLISHING A JOINT LEGISLATIVE STUDY COMMITTEE ON VOCATIONAL  
AND TECHNOLOGICAL EDUCATION.**

**(TEXT OF BILL BEGINS ON NEXT PAGE)**

1 **Be it enacted by the Legislature of the State of Arizona:**

2 Section 1. Joint legislative study committee on vocational and  
3 technological education; study; report

4 A. The joint legislative study committee on vocational and  
5 technological education is established and consists of:

6 1. Two members of the house of representatives who are appointed by  
7 the speaker of the house of representatives, neither of whom shall be  
8 members of the same political party. The speaker of the house of  
9 representatives shall select one of the members to cochair the committee.

10 2. Two members of the senate who are appointed by the president of  
11 the senate, neither of whom shall be members of the same political party.  
12 The president of the senate shall select one of the members to cochair the  
13 committee.

14 3. The superintendent of public instruction or the superintendent's  
15 designee.

16 4. One member of an urban school district governing board in a  
17 school district that offers vocational and technological education who is  
18 appointed by the president of the senate.

19 5. One member who represents a school district that participates in  
20 a joint technological education district who is appointed by the president  
21 of the senate.

22 6. One member who is a principal of a rural school that offers  
23 vocational and technological education who is appointed by the speaker of  
24 the house of representatives.

25 7. One member who is a parent interested in vocational and  
26 technological education who is appointed by the speaker of the house of  
27 representatives.

28 8. One member who is a school district program administrator for  
29 vocational and technological education who is appointed by the speaker of  
30 the house of representatives.

31 9. One member of the business community who is appointed by the  
32 president of the senate.

33 10. One member who represents the state board of education who is  
34 appointed by the speaker of the house of representatives.

35 11. One member who represents the governor's office who is appointed  
36 by the governor.

37 12. One member who is a president of a community college in an urban  
38 community college district that offers vocational and technological  
39 education who is appointed by the president of the senate.

40 13. One member who is a president of a community college in a rural  
41 community college district that offers vocational and technological  
42 education who is appointed by the president of the senate.

1           B. The committee shall study the following:

2           1. The feasibility and cost of adding two credit hours of  
3 vocational and technological education to the minimum course of study for  
4 high school graduation.

5           2. All funding sources available for vocational and technological  
6 education and the timeframe to access such sources.

7           3. The effect on the school day of pupils participating in  
8 vocational and technological education programs.

9           4. The effect of vocational and technological education programs on  
10 similar community college programs, including dual enrollment, and how, if  
11 appropriate, school districts and community colleges determine average  
12 daily membership and full-time student equivalent student for pupils  
13 participating in such programs.

14          5. The different models for delivering vocational and technological  
15 education programs and the relative efficiency of each model.

16          6. The benefits to students in vocational and technological  
17 education programs compared to students in other academic education  
18 programs.

19          7. The number and type of vocational and technological courses that  
20 are presently being offered in urban districts.

21          8. The number and type of vocational and technological courses that  
22 are presently being offered in rural districts.

23          9. Whether school counselors at high schools encourage high school  
24 students to participate in vocational and technological education courses.

25          10. Current business partnerships with high schools regarding  
26 vocational and technological education.

27          C. The committee shall submit a report of its findings and  
28 recommendations to the governor, the president of the senate and the  
29 speaker of the house of representatives on or before December 1, 2003. The  
30 committee shall provide a copy of the report to the secretary of state and  
31 the director of the Arizona state library, archives and public records.

32          Sec. 2. Delayed repeal

33          This act is repealed from and after December 31, 2003.

APPROVED BY THE GOVERNOR APRIL 28, 2003.

FILED IN THE OFFICE OF THE SECRETARY OF STATE APRIL 28, 2003.

## FY 2004 CTE Program List

Arizona Department of Education

Rank	2004 CIP	2004 Program Name	2002 Reference
1	51.1600	Nursing Services	51.1600 Nursing Services
2	52.0200	Business Management and Administrative Services	52.0200 Business Management & Administrative Services
3	15.1200	Business Information Technology Services	52.1200 Business Information Technology Services
4	43.0200	Fire Science	43.0200 Fire Science
5	15.1300	Drafting/Design Technology	48.0100 Drafting Technology
6	01.0600	Horticulture	01.0600 Horticulture
7	52.1900	Fashion Design and Merchandising	20.0300 Apparel Design & Merchandising
8	15.0300	Electronics Technology	47.0100 Electronics Technology
9	43.0100	Law, Public Safety and Security	43.0100 Law Enforcement
10	52.0400	Administrative Information Services	52.0400 Administrative Information Services
11	46.0300	Electrical and Power Transmission Technology	46.0300 Residential Electrician
12	13.1500	Education Professions	
13	47.0600	Automotive Technologies	47.0600 Vehicle Equipment Technicians
14	51.0800	Allied Health Services	51.0800 Allied Health Services
15	46.0400	Construction Technologies	46.0400 Building Maintenance 46.9900 Building Trades 46.0200 Carpentry
16	52.0300	Accounting and Related Services	52.0300 Accounting
17	52.0900	Hospitality Management	08.0900 Hospitality Services
18	48.0500	Precision Metal Working	48.0500 Precision Metal Workers
19	52.1800	Marketing, Management and Entrepreneurship	08.0700 Sales and Marketing
20	13.1200	Early Childhood Professions	20.0200 Early Childhood Professions
21	10.0200	Radio/Television Technology	10.0100 Media Communication
22	49.0200	Heavy Equipment Operation	49.0200 Heavy Equipment Operation
23	52.0800	Financial Services	52.0800 Financial Services
24	12.0500	Culinary Arts	12.0500 Food Production/Culinary Arts
25	47.0200	Heating, Ventilation and Air Conditioning	47.0200 Heating, Ventilation, Air Conditioning
26	10.0300	Graphic Communications	48.0200 Graphic Communication 50.0400 Visual Communications
27	03.0200	Renewable Natural Resources	03.0200 Renewable Natural Resources
28	12.0400	Cosmetology	12.0400 Cosmetology
29	48.0700	Woodworking	48.0700 Cabinetmaking
30	01.0300	Agriscience	01.0300 Agriscience

**Green = Merged Program**

Blue = New CIP Number/Redefined Program

**Orange = New Program**

# CAREER AND TECHNICAL EDUCATION

## 2002 DATA SNAPSHOT

Student Population	Total Number
2002 High School 9-12 Enrollment	221,757
2002 Total CTE 9-12 Enrollment	117,852
2002 Level III CTE Program Enrollment	70,765
2002 CTE Concentrators with 2 Credits	14,924
2002 CTE Program Completers	9,198
Number of FY 2001 CTE Completers Placed In School, Job or Military After Graduation	5,289 of 8,054
Number of Additional FY 2001 CTE Concentrators Placed in School, Job or Military After Graduation	3,157 of 6,686
51,876 High School Students Take 2002 AIMS Reading	63 % meet or exceed the standard
55,439 High School Students Take 2002 AIMS Writing	61 % meet or exceed the standard
7,770 CTE Concentrators Who Left Secondary Education in 2002 Took Both AIMS Reading and Writing	65 % meet or exceed both the Reading and Writing Academic Standards

CTE Students comprise 53% of 9-12 high school enrollment.

One-third of CTE total enrollment take program-level courses.

One-fifth of CTE program-level students take a concentration of 2 credits.

60 % of students with a concentration of 2 credits complete a CTE program.

65 % of CTE program completers are placed in school, a job, or the military.

### FEDERAL 2004

- Total: Basic Grant \$23,459,875  
Tech Prep \$ 2,150,847  
\$25,610,722  
  
Secondary \$21,769,114  
P.S. \$ 3,841,608
- Available for 27 months. Available July 1<sup>st</sup> of fiscal year.
- 5% cap on administration.
- All federal funded positions are primarily in Marilee's unit – accountability, which is not ADM under the Act, plus a few clerical.
- Approximately 19 people.

### STATE 2004

- Total: \$11,154,100
- Technical Assistance and Admin
  - State Supervisors for all the major program areas – Ag, Marketing, Business, the Technologies.
  - All the Youth Group Supervisors – FFA, FBLA, Skill USA (VICA), etc.
  - Administration costs.
  - 32 FTE's
  - \$ 1,902,800
  - Money basically covers salary, ERE and assessed costs such as rent, phones, computer connections, etc.. Basically, all other operating costs cover with federal administrative funds.
- Assistance \$ 9,251,300
  - Allocated on Enrollment – 75%
    - \$6,938,475
  - Allocated on Placement -- 25%
    - \$2,312,825
- Available for 12 months (state fiscal year).

### LOCAL/COUNTY TAX REVENUES

- Per last Superintendents Annual Report (FY 2002; FY 2003 not due out until Dec.) - ≈ \$72,000,000



## Arizona High School Graduation Requirements

### R7-2-302.04. Minimum Course of Study and Competency Requirements for Graduation from High School

The Board prescribes the minimum course of study and competency requirements as outlined in subsections (1) and (2) for the graduation of pupils from high school. The Board establishes 20 credits as the minimum number of credits necessary for high school graduation effective for the graduation class of 1996. Students shall obtain credits for required subject areas as specified in subsection (1)(a)(i) through (vi) based on completion of subject area course requirements or competency requirements. At the discretion of the local governing board, credits may be awarded for completion of elective subjects specified in subsection (1)(a)(vii) based on completion of subject area course requirements or competency requirements.

#### 1. Subject area course requirements.

a. The awarding of a credit toward the completion of high school graduation requirements shall be based on successful completion of the subject area requirements prescribed by the State Board and local governing board as follows:

i. Four credits of English or English as a Second Language, which shall include but not be limited to the following: grammar, writing, and reading skills, advanced grammar, composition, American literature, advanced composition, research methods and skills and literature. One-half credit of the English requirement shall include the principles of speech and debate but not be limited to those principles.

ii. One and one-half credits in instruction in the essentials, sources and history of the constitutions of the United States and Arizona and instruction in American institutions and ideals and in the history of Arizona.

iii. One credit of world history/geography.

iv. Two credits of mathematics.

v. Two credits of science.

vi. One credit of fine arts or vocational education.

vii. Eight and 1/2 credits of additional courses prescribed by the local governing board subject to the approval of the State Board pursuant to A.R.S. § 15-341(A)(7).

b. Credits earned through correspondence courses to meet graduation requirements shall be taken from an accredited institution as defined in R7-2-601. Credits earned thereby shall be limited to 4, and only one credit may be earned in each of the following subject areas:

i. English as described in subsection (1)(a)(i) of this rule.

ii. Social Studies.

iii. Mathematics.

iv. Science.

c. Delivery of distance education. In addition to traditional methods of course delivery, courses may also be offered through distance education.

Distance education does not include correspondence courses. Distance education is defined as instructional-learning arrangements in which the distance education instructor and the student are separated geographically. Instruction is delivered by means of telecommunications technologies such as satellite, microwave, telephone, cable, fiber optics. The instruction supplements or comprises the entire course content and provides for two-way interactive communications between the instructor and the student during the time of the instruction. Communication or interaction occurs through the use of technologies such as voice, video or computer-mediated communications.

i. Distance education providers shall register with the Department of Education and satisfy the following requirements:

(1) Be accredited or affiliated with an accredited institution as defined in R7-2-601.

(2) Validate that the instructor of the distance education program:

(a) Possesses a current Arizona teaching certificate valid for the level and subject of the instruction to be taught; or

(b) Possesses a current teaching certificate from the recognized certifying authority of the sending location valid for the level and subject of the instruction to be taught; or

(c) Is employed by or affiliated with, in the content area of instruction, an accredited institution as defined in R7-2-601.

ii. Distance education may be used as a part of the instructional program. School districts shall ensure that:

(1) Only those distance education providers registered with the Department of Education are used to provide distance education; and

(2) The teaching partners who assist the students in receiving the instruction onsite have instructional and technical facilitator training and are supervised by an individual certified pursuant to R7-2-601 et seq.

d. Local governing boards may grant to vocational-technological education program completers a maximum of 3 1/2 credits to be used toward the Board English, mathematics or science credit requirements for graduation, subject to the following restrictions.

i. The Board has approved the vocational-technological education program for equivalent credit to be used toward the Board English, mathematics or science credit requirements for graduation.

ii. Only one credit in each of English, mathematics or science may be granted.

iii. For vocational-technological programs in which only one credit is offered, either vocational or English, mathematics or science credit may be granted.

iv. For vocational-technological programs in which two or more credits are offered, only one credit may be used for English, mathematics or science.

#### 2. Competency requirements.

a. The awarding of a credit toward the completion of high school graduation requirements shall be based on the successful completion of State Board-adopted essential skills requirements for subject areas listed in subsection (1)(a)(i) through (vi) and the successful completion of the competency requirements for the elective subjects specified in subsection (1)(a)(vii). Competency requirements for elective subjects as specified in subsection (1)(a)(vii) shall be the essential skills adopted by the State Board. If there are no adopted essential skills for an elective subject, the local governing board shall be responsible for developing and adopting competency requirements for the successful completion of the elective subject.

b. The determination and verification of student accomplishment and performance shall be the responsibility of the subject area teacher.

c. Upon request of the student, the local governing board shall provide the opportunity for the student to demonstrate competency in the subject areas listed in subsection (1)(a)(i) through (vi) above in lieu of classroom time.

3. The local governing board of each school district shall be responsible for developing a course of study and graduation requirements for all students placed in special education programs in accordance with A.R.S. Title 15, Chapter 7, Article 4 and A.A.C. R7-2-401 et seq. Students placed in special education classes, 9-12, are eligible to receive a high school diploma upon completion of graduation requirements, but reference to special education placement may be placed on the student's transcript or permanent file.

#### Historical Note

Adopted effective July 10, 1992 (Supp. 92-3). Amended effective May 3, 1993 (Supp. 93-2). Amended effective December 17, 1998 (Supp. 98-4).

ATTACHMENT

6

# Arizona's Joint Technological Education School Districts

<b>CAVIT</b>	Central Arizona Valley Institute of Technology
<b>Operations Began</b>	July 2001
<b>Participating Districts</b>	Casa Grand Union; Coolidge Unified; Florence Unified; Maricopa Unified; Santa Cruz Union

<b>CVIT</b>	Cobre Valley Institute of Technology
<b>Operations Began</b>	July 2001
<b>Participating Districts</b>	Hayden-Winkelman Unified; Superior Unified; Miami Unified

<b>CAVIAT</b>	Coconino Association for Vocations, Industry and Technology
<b>Operations Began</b>	July 2001
<b>Participating Districts</b>	Fredonia-Moccasin Unified; Page Unified; Williams Unified

<b>CTD</b>	Cochise Technology District
<b>Operations Began</b>	July 2001
<b>Participating Districts</b>	Tombstone Unified; St. David Unified; Benson Unified; Willcox Unified; Bowie Unified; San Simon Unified; Valley Union

<b>EVIT</b>	East Valley Institute of Technology
<b>Operations Began</b>	July 1991
<b>Participating Districts</b>	Apache Junction Unified; Chandler Unified; Fountain Hills Unified; Gilbert Unified; Queen Creek Unified; J.O. Combs Elementary; Mesa Unified; Scottsdale Unified; Tempe Unified; Higley Unified

<b>GIFT</b>	Gila Institute for Technology
<b>Operations Began</b>	July 2001
<b>Participating Districts</b>	Ft. Thomas Unified; Pima Unified; Thatcher Unified; Stafford Unified; Solomon Elementary

<b>NATIVE</b>	Northern Arizona Technological Institute of Vocational Education
<b>Operations Began</b>	July 2003
<b>Participating Districts</b>	Chinle Unified; Ganado Unified; Kayenta Unified; Pinon Unified; Red Mesa Unified; Sanders Unified; Window Rock Unified

<b>NAVIT</b>	Northern Arizona Vocational Institute of Technology
<b>Operations Began</b>	July 1999
<b>Participating Districts</b>	Blue Ridge Unified; Heber-Overgaard Unified; Holbrook Unified; Payson Unified (joined July 2003); Round Valley Unified; Show Low Unified; Snowflake Unified; St. Johns Unified; White River Unified (joined July 2003); Winslow Unified; Joseph City Unified

<b>VACTE</b>	Valley Academy of Career and Technology Education
<b>Operations Began</b>	July 2001
<b>Participating Districts</b>	Mingus Union; Camp Verde Unified; Sedona/Oak Creek Joint Unified; Cottonwood Oak Creek Elementary District; Clarkdale-Jerome Elementary

<b>West-MEC</b>	Western Maricopa Education Center
<b>Operations Began</b>	July 2003
<b>Participating Districts</b>	Agua Fria Union; Buckeye Union; Cartwright Elementary; Dysart Unified; Fowler Elementary; Pendergast Elementary; Peoria Unified; Saddle Mountain Unified

Interim agendas can be obtained via the Internet at <http://www.azleg.state.az.us/InterimCommittees.asp>

## ARIZONA STATE LEGISLATURE

### INTERIM MEETING NOTICE OPEN TO THE PUBLIC

#### JOINT LEGISLATIVE STUDY COMMITTEE ON VOCATIONAL AND TECHNOLOGICAL EDUCATION

**Date:** Tuesday, December 2, 2003

**Time:** 1:00 p.m.

**Place:** House Hearing Room 3

#### AGENDA

1. Call to order
2. Presentation by Arizona Department of Education
3. Presentation by Arizona Board of Regents
4. Presentation regarding Vocational Education and Tucson
5. Public Testimony
6. Discussion
7. Committee Recommendations
8. Adjourn

#### Members:

Senator Barbara Leff, Cochair  
Senator Richard Miranda  
Keith Crandell  
Dr. Matthew A. Diethelm  
Gregory Donovan  
Milt Ericksen  
Dr. Gene Giovannini

Representative Linda Gray, Cochair  
Representative Olivia Cajero Bedford  
Richard Hein  
Dr. Marv Lamer  
Dr. Gary Passer  
Michelle Rill  
Ken Van Winkle

11/20/03  
jmb

People with disabilities may request reasonable accommodations such as interpreters, alternative formats, or assistance with physical accessibility. If you require accommodations, please contact the Chief Clerk's Office at (602) 542-3032, (TDD) 542-6241.

ARIZONA STATE LEGISLATURE  
Forty-sixth Legislature -- First Regular Session

JOINT LEGISLATIVE STUDY COMMITTEE ON  
VOCATIONAL AND TECHNOLOGICAL EDUCATION

Minutes of Meeting  
Tuesday, December 2, 2003  
House Hearing Room 3 -- 1:00 p.m.

Chairman Gray called the meeting to order at 1:00 p.m. and attendance was noted by the secretary.

**Members Present**

Senator Leff, Cochair  
Keith Crandell  
Dr. Matthew A. Diethelm  
Gregory Donovan  
Milt Ericksen  
Dr. Gene Giovannini

Representative Cajero Bedford  
Representative Gray, Cochair  
Dr. Marv Lamer  
Dr. Gary Passer  
Ken Van Winkle

**Members Absent**

Senator Miranda

Richard Hein  
Michelle Rill

**Speakers Present**

Cathy McGonigle, Associate Executive Director of Public Affairs, Arizona Board of Regents  
Milt Ericksen, Deputy Associate Superintendent of Vocational and Technological Education,  
Arizona Department of Education  
Ted Davis, Arizona Department of Education  
Michael Hunter, Vice President, Arizona Tax Research Association  
Jacky Alling, Executive Director, Arizona Alliance for Arts Education  
Dr. Gretchen Boyer, President, Arizona Alliance for Arts Education  
Chester Crandell, Superintendent, Northern Arizona Vocational Institute of Technology  
Tony Maldonado, Director of Career and Technical Education, Mesa Public Schools  
Elizabeth Baskett, Majority Research Analyst, House Health Committee  
Helen Bootsma, Manager, Career Pathways Team, Arizona Department of Education

At Chairman Gray's request, the Members introduced themselves.

## Presentation by Arizona Board of Regents

Cathy McGonigle, Associate Executive Director of Public Affairs, Arizona Board of Regents (ABOR), related that in 1994, the ABOR approved a policy change to become effective in 1998 to increase the number of high school credits required for university admission from 11 to 16, which includes one year of fine arts. Practical arts (or vocational education) was not added as a requirement or optional requirement to fine arts, and she could not find any evidence that career and technical education (CTE), vocational education, or practical arts were ever a requirement prior to 1994; however, those could have been taken as electives when only 11 credits were required. She added that much study was done prior to changing the requirements to determine what high school coursework would be most necessary to best prepare students for college level courses. Stakeholders were consulted, and C. Diane Bishop, then the Superintendent of Public Instruction, was very involved in the process and supportive of the changes.

Ms. McGonigle indicated that stakeholders requested that the ABOR assess the feasibility and consider broadening the fine arts requirement to include practical arts, so the ABOR staff and universities are reviewing information provided by the Arizona Department of Education (ADE) in order to make a determination.

Mr. Ericksen said the main concern is that many students in CTE programs wishing to continue their education find they must take a fine arts course during their senior year. The students typically take courses like pottery making and basket weaving and do not end up becoming concentrators and completers in the CTE programs. He related that a data snapshot shows that students who complete CTE programs as concentrators and completers score above the normal student population on Arizona's Instrument for Measuring Standards (AIMS) test. All that is being asked is the opportunity to be part of the admissions requirement at the universities so students can complete existing programs and attend a university.

Ms. McGonigle stated that there are some electives out of the 20 credits that students could take in the CTE area. The ABOR and university staff will take into consideration what best prepares someone for college level courses, along with his comments.

Mr. Crandell pointed out that a study conducted by the National Center for Educational Statistics (NCES) showed that 12 percent of students with no vocational classes completed baccalaureate degrees within six years compared to 16 percent who took one or more vocational classes, so it appears that some vocational education helps students better complete college. One university system in California realized that students with a vocational background have a better chance of completing baccalaureate degrees and revamped the admission requirements so a vocational student can be accepted on the basis of that training.

Mrs. Cajero Bedford advised that Northern Arizona University has a career workshop program to train prisoners within a year of returning to the real world (Attachment 1). It is a shame that career training was not provided in high school so perhaps the people would not have been in prison. She added that while this is a good program, perhaps funding could be dropped to a lower level and emphasis placed on CTE.

## Presentation by Arizona Department of Education

Milt Erickson, Deputy Associate Superintendent of Vocational and Technological Education, Arizona Department of Education, stated that ADE commissioned a study by a noted specialist in CTE from Ohio State, which was completed in April 2003. The purpose was to create a coherent sequence of instruction that would result in exemplary CTE programs throughout Arizona. After the study was completed, a broad spectrum of people representing CTE from around the state met in July 2003 in Tucson and held a follow-up meeting in October 2003 in Phoenix. Initial recommendations were developed and condensed to four recommendations, a few of which are going into subcommittees. All of the issues will be addressed at some time in the future.

He added that he is a member of the Governor's Council for Workforce Policy, which recommended that a survey be conducted among business people in Arizona to determine the needs of business and industry, as well as data from labor statistics in Arizona and the United States Department of Labor. The study will continue through 2005. Currently, Congress is addressing the Workforce Investment Act, and the Individuals With Disabilities Education Act (IDEA) should be next. Attempts are being made to determine when the federal Carl D. Perkins Act may be addressed. He is very hopeful about the Act since the original blueprint was set aside and a new blueprint involves approximately \$1.2 billion in funding throughout the country that would greatly benefit CTE.

Mr. Erickson reviewed a handout regarding *CTE Recommendations to HB 2001 Study Committee* (Attachment 2).

Ted Davis, Arizona Department of Education, in relation to recommendation #3, conveyed that the original session law basically only funded placement and enrollment. The committee to the board recommended that additional factors be considered so the proposed language adds those. He advised Mrs. Cajero Bedford that the budget increased about 5 percent in 10 years, but relative to inflation, the buying power has decreased. Increases have been staff related. In relation to federal funding, CTE benefited by the change in the census data from 1990 to 2000 so Arizona realized about an 8 percent gain. Federal program funds have been much more generous than state dollars in terms of growth and more reflective of inflation and additional costs.

Mr. Ericksen stated that CTE serviced over half of the students in Arizona in public high schools, and as a result of completing, CTE students outperformed the general student population with the current AIMS, in some cases, by 15 to 20 percentage points. The skills the students receive in CTE greatly benefit and enhance their postsecondary career.

## Public Testimony

Michael Hunter, Vice President, Arizona Tax Research Association, expressed frustration that financial aspects were not a larger part of the Committee's deliberations. He indicated that ATRA was very involved in designing JTEDs and referred to the East Valley Institute of Technology (EVIT) for a while as the model for using government and taxpayer resources efficiently, but the centralized model is now predominantly a satellite model. Northland Pioneer College is providing technology because it is difficult for some students to travel the great

distances that are involved; however, even at EVIT, more and more of the satellite model is being used where the programs are often held at the individual district campuses. Additionally, there is something akin to dual enrollment occurring between the JTED and school districts, and in instances where the community college is also offering credit for that curriculum, there is something akin to a triple dip.

Mr. Hunter indicated that he is concerned about the extent to which JTED dollars going to school districts are not supplementing the technology programs already provided, but sometimes supplanting the programs completely. He noted that it was anticipated that many districts would avail themselves of this, but with 10 JTEDs consisting of approximately 64 participating districts, during the last election, two elementary school districts voted to participate. Some elementary school districts participated in JTEDs before in order for high school students to participate in a high school district outside the boundaries of the elementary school district, but Pendergast and Cartwright school districts actually feed into high school districts. In talking to the superintendent at Pendergast, he learned that JTED services are going to be available to seventh and eighth graders. There is no limitation in statute, so expansion is occurring beyond what he believes was originally intended.

Mr. Hunter clarified that he does not have proof that supplanting is occurring, but it is a concern. When some of the East Valley districts that participate in the EVIT program had bond and capital override elections recently for technology programs, questions were raised about how the money is going back and forth. Some administrators at EVIT expressed concern about participating districts being reluctant to allow students to go to the EVIT campus because the high school could not count the students during those hours, but combining resources allows both to count the student for that time to some extent. He is concerned when that line is not cleanly cut.

Mr. Lamer remarked that he is involved with the JTED, which is governed by an intergovernmental agreement (IGA) containing language defining supplanting and maintenance of effort to ensure that does not happen in those districts. The resources received from the JTED are subject to review on an annual basis and even closer scrutiny on a biennial basis.

Mr. Donovan stated that his JTED has three elementary school districts, one of which is Pendergast, that cannot claim any enrollment for average daily membership (ADM) or anything else. The property owners in that community pay the tax and an IGA allows for some support at the junior high school level for CTE awareness. It is part of the process of promoting CTE to those districts and those that wish to participate.

When Mrs. Gray asked what percentage of tax dollars go to Pendergast Elementary, Mr. Donovan replied that he does not know, but currently the agreement long-term is to receive \$100 per student on eighth grade enrollment to support the program.

Mr. Hunter remarked that he is glad to hear the IGA addresses the issue. He did not mean to allege any wrongdoing on anybody's part, but in dealing with issues like this before where incentives were provided to count students that might otherwise not be eligible, it is something to be aware of.

Mr. Crandell stated that in relation to the concept of satellite districts as opposed to the unified campus at EVIT, NAVIT has gone quite a way toward having centralized programs; however, another dimension that has come into play is an awareness by some school districts that they can take advantage of programs offered in another district. The biggest benefit from the satellite program is funding of programs that were fading. CTE courses are expensive to initiate and sustain with the changes in technology, so many courses were deleted because the school district could not afford them. With the qualifying tax rate where voters of the school district agree to tax themselves additionally, programs can now be provided and courses sustained that were fading. The JTED is a godsend to each of the districts, whether at a central or satellite campus.

Jacky Alling, Executive Director, Arizona Alliance for Arts Education (AAAE), related that arts education does not receive any earmarked funding in Arizona, so she is excited to hear about the reauthorization of Carl D. Perkins money and other funds. Arts education relies a great deal on these major policy lynchpins, such as high school graduation requirements and the university fine arts requirement. She submitted that the recommendation under consideration by the Committee would potentially pose threats to the high school fine arts program, and allowing fine arts and practical arts at the university level would give local school districts that are already financially squeezed an opportunity to opt out of funding arts education. She is excited about continuing the dialogue, but recommended that the Committee not make changes to the high school graduation requirement of vocational or fine arts, or the university entrance requirement of fine arts.

When Senator Leff asked what options could be considered for students in CTE programs, Ms. Alling suggested discussion of cross-curricular relationships between the fine arts and vocational arts.

Mr. Lamer conveyed that vocational education would just like the same fair shake as fine arts. There should not be a discrediting of the high school student who chooses to go to college but chose a vocational course to meet the high school requirement as opposed to fine arts, which is how the current process works. He added that it is important to keep in mind that a single course in CTE would not necessarily qualify for block grant funding or Carl D. Perkins funding. He added that he likes the crossover idea.

Ms. Alling reiterated the fact that there is no earmarked funding provided for arts education programs in the state, so those policies are the lynchpin for keeping the programs in place.

Mr. Lamer stated that small, rural school districts that do not receive vocational funding under the Carl D. Perkins Act or block grants receive the same obligatory funding under the maintenance and operations budget as the fine arts, so the field would be level in terms of the source of funding in those districts.

Mrs. Cajero Bedford expressed appreciation for the fine arts, but indicated that she is talking about earning a living. The goal is basically to allow students to see what they can do to become successful and reduce high school dropout rates.

Ms. Alling responded that many research studies show that arts learning and involvement through the arts significantly reduces dropout rates as well.



Mr. Donovan remarked that for 50 years, society has sold the idea that the road to success is lined with college, but in laying out graduation plans, students must decide whether to take courses that specifically eliminate going to a university or college or allow them to attend a university or college. He support the arts for all children, but believes CTE should be on a level playing ground with entrance to the universities.

Mrs. Cajero Bedford stated that from working with people in CTE, she understands that counselors generally push students toward fine arts as opposed to CTE.

Chairman Gray referred to an EVIT brochure and pointed out that many of the courses include mathematics and should be considered as qualifying for attendance at a university (Attachment 3). She recalled that a concern expressed in the Senate Education Committee was that low-income children would be encouraged not to attend the universities and pushed into vocational technical positions. The person has a Hispanic background and wants children to realize that it is possible to achieve the dream of going to college.

Dr. Gretchen Boyer, President, Arizona Alliance for Arts Education, acknowledged that there are no earmarked funds for arts education in Arizona and asked that the Members consider, in any decision that is made, the fact that the burden of broadening CTE will be placed on the maintenance and operations budget of the local school district. Small and rural school districts, which have major problems in terms of money and offering quality arts education, will have a real struggle. School districts in the state are already reducing arts programs, and she is not concerned as much for this budget, but next year's, when the programs may be eliminated. She indicated that making a gifted child take a class that is not advanced placement (AP) could potentially lower the child's class standing and probably would not go over well with parents. Also, it is important to think about the needs of all children, not just vocational students. Many of the comments made by Mr. Ericksen can be made substituting the arts. Regarding ABOR and the college entry requirement, she agreed that further study is needed.

Chester Crandell, Superintendent, Northern Arizona Vocational Institute of Technology, recommended looking at the bigger picture of whole school reform, bringing everybody to the table. Regarding Mr. Hunter's comments, he stated that NAVIT is different because 13,000 square miles are covered in the district, so a partnership was formed with Northland Pioneer College. Also, with an assessed valuation of less than \$1 billion, it is not possible to bond to construct a central facility or several buildings at different locations, so the partnership with the community college has been very beneficial. It is less expensive for NAVIT to offer programs because of the partnership, and more classes are offered to the adult population. He stated that not one program taught at the home district is duplicated at the central district, and if the program was taken away, children in the northeastern part of the state would suffer tremendously. He said he will provide figures to the Members showing the impact the partnership has had on students in the area.

Tony Maldonado, Director of Career and Technical Education, Mesa Public Schools, stated that when the change to the university requirements was made by the BOR, CTE enrollment at their district took a nosedive and the number of students taking the arts increased, so he knows what

the arts people are concerned about; however, CTE has already taken a hit and needs a level playing field again.

Elizabeth Baskett, Majority Research Analyst, House Health Committee, reviewed three possible recommendations by the Committee (Attachment 4).

Chairman Gray, referring to recommendation #3, stated that the Legislature has not mandated to the ABOR what to require for college entrance in the past and probably should not do so now, but someone can make the motion if they choose. It would probably be difficult to get through the Legislature.

Regarding recommendation #1, Chairman Gray referred to Dr. Boyer's comment about AP courses and stated that there are plenty of other opportunities to increase a student's grade point average. A bright student could take a course that would provide the four points instead of five, and there are only a certain amount of AP courses to take.

Senator Leff remarked that the term elective means elective and students should be allowed to take what they want. Students must already take the arts or vocational education to graduate so she does not know why it is necessary to mandate which elective students should take in addition to what is in statute. She indicated that she cares about increasing vocational education dollars and offering programs to students, but did not expect the Committee to be doing this. She opined that the makeup of the Committee is too unfair to move the recommendation because just about every Member is somehow connected to vocational education.

Mr. Donovan noted that the bill specifically stated that people from specific areas should be on the Committee.

Mrs. Cajero Bedford related that she and Representative Gray met and decided that the different areas of education should be represented.

The Members agreed that not everyone is from vocational education, but different areas of education.

Mrs. Cajero Bedford stated that she would like to meet with the ABOR because she does not believe the regents are totally inflexible.

Chairman Gray submitted that part of the problem is with the articulation and how many of the CTE courses could qualify for the credits, which should be reviewed by ADE and added through legislation.

**Mrs. Cajero Bedford moved that the Committee recommend the Arizona State Board of Education change its minimum course of study and competency requirements for graduation from high school to require all high school students take a vocational education course as part of their 8-1/2 credit electives requirement.**

Helen Bootsma, Manager, Career Pathways Team, Arizona Department of Education, advised that the Arizona Administrative Code from Title 7 in Education refers to credits, not courses, adding that a credit is a Carnegie unit of 120 hours of instruction.

**Mrs. Cajero Bedford moved to amend the motion by changing the second "course" to "credit." Question was called on the motion as amended and the motion carried.**

Mr. Diethelm, referring to the motion just passed, stated that as a member of the State Board of Education, which will have to implement the recommendation, there are issues of availability of courses and capita, which the next recommendation attempts to jog around, but would not solve the problem. He is concerned that it cannot be executed.

Chairman Gray stated that passing recommendation #2 would probably be detrimental to the bill since it mandates something without funding.

Chairman Gray, in response to Mr. Diethelm, agreed that there is some concern, especially for the small school districts, but perhaps there would be motivation for unification or consolidation.

Mr. Van Winkle remarked that he represents a high school in a small area where most of the electives must be vocational or fine arts, so he would not anticipate increasing costs.

Mr. Maldonado stated that he represents a large district that serves about 60 to 70 percent of the population. If this credit is mandated, another 30 percent of the population will have to be served, which would increase teacher contracts, etc. He supports vocational education, but advised caution in making mandates without funding.

In response to a query by Chairman Gray as to the percentage of students not taking any type of vocational technical courses, Mr. Maldonado responded that he does not know the amount because some students take one credit. Of the 20,000 students in the secondary schools, 9th through 12<sup>th</sup> grade, about 8,500 per year are served that are unduplicated, which means the students are only counted once no matter how many CTE courses are taken.

Chairman Gray indicated that it would be interesting to know during the legislative process when the bill is heard what percent are not taking the courses and the fiscal impact that could have on a school district.

Discussion ensued regarding recommendation #3.

Mr. Lamer noted that the Committee was charged with a huge task and asked if a recommendation can be made to expand or extend the life of the Committee so issues can be wrestled in more detail.

Chairman Gray responded that the recommendation can be made, but it takes a lot to get a bill through. She is aware that the Chair of the Senate Education Committee dislikes Study Committees.

**Mr. Lamer moved that the Committee recommend to Leadership that the Committee's life be extended for one more year.**

Senator Leff said perhaps the Committee charge should be rewritten in order to evaluate other issues that were raised.

Chairman Gray asked the Members to let her know by e-mail which of the nine initial charges of the Committee they would like to address, as well as any additional items, and she will e-mail back a consensus.

**Question was called and the motion carried.**

**Mrs. Cajero Bedford moved that the Committee recommend that the Arizona Board of Regents amend their policy to accept vocational course credits to be accepted by the Board. The motion carried.**

Without objection, the meeting adjourned at 3:22 p.m.

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Linda Taylor, Committee Secretary  
December 18, 2003

(Original minutes, attachments, and tape are on file in the Office of the Chief Clerk.)



Rhonda Muntz participated in a Prison to Work program at Perryville and now works for Smokey O's Roast Pigs & Catering. Muntz says the program helped her with people skills and self-assurance.

Nick de la Torre/The Arizona Republic

# Prison program helps women cook up new life

By Senta Scarborough  
The Arizona Republic

Their classroom is a fully equipped kitchen with a stainless steel counter. They chop vegetables, plan menus and clean the kitchen.

But the knives are attached to the counter with metal cords, and other utensils are locked in a gray metal box, because in addition to serving appetizing meals, these students are serving time for their crimes.

Since June, 26 women at the Arizona State Prison at Perryville have joined a four-month Prison to Work program conducted in association with the Northern Arizona University School of Hotel and Restaurant Management.

"They know they have made mistakes in the past and they are getting whatever this place has to offer," program Manager Barbara Carlton said. "But the students move with the knives. The knives don't move with the students."

Inmate Julie Hollibaugh, who said she couldn't even boil water before the classes, said the program has given her confidence.

"It doesn't matter what kind of day I have. It will always end my day on a positive note," said Hollibaugh, 35, a mother of two boys. "A lot of people get depressed in here. It is an easy thing to fall into. I go to class each day and come out with self-esteem."

**"A lot of people get depressed in here. It is an easy thing to fall into. I go to class each day and come out with self-esteem."**

— Inmate Julie Hollibaugh

NAU Associate Dean Galen Collins spent three years visiting prisons, writing the program curriculum, raising funds and working with prison officials to bring the program to fruition. He became interested after his brother, Daniel, ended up behind bars.

"With a strong community effort, someday we

can have prisons viewed as learning centers without revolving doors," Collins said.

The program is geared to help

## Requirements

Inmates at the Arizona State Prison at Perryville must meet the following requirements to get into the Prison to Work

program, co-sponsored by the prison and Northern Arizona University's School of Hotel and Restaurant Management:

- Inmate must be within a year of release.
  - Have a high school diploma or GED.
  - Maintain a clean disciplinary record.
  - Be considered a low-risk offender.
  - Read at the 10th-grade level.
  - Have been convicted of a non-violent crime.
- After the women graduate, they leave prison having earned three certifications, including the ServSafe food handler's card and Northern Arizona University certificates in customer service and culinary arts skills.

Source: Arizona Department of Corrections and Northern Arizona University.

## CTE Recommendations to HB 2001 Study Committee

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- 1) Career preparation should be fully integrated in the Arizona educational system. High school requirements should be revised to require **all** students to take a concentration of Career and Technical Education.
- 2) Provide additional state funding for professional technical assessments such as industry certification and licensure tests and end of program assessments such as NOCTI to serve as an incentive to school districts. This will result in a highly skilled workforce for Arizona.
- 3) Monies appropriated for the state block grant for **career and technical**, vocational education program for fiscal year **2005-2006** shall be allocated up to: **seventy five percent** based on **career and technical** vocational education student counts from fiscal year **2004-2005**; **twenty five percent** based on placement data, as defined by the **Arizona State Board of Education**, from fiscal year **2004-2005**; up to 15% academic attainment as determined by **career and technical** vocational student performance on the state's standardized academic test(s); up to **twenty five percent** for passing the state identified professional technical assessment.
- 4) CTE requests the State's level of support for CTE to increase to adjust for inflation. When adjusted for cost of living, the current buying power of the FY 2004 appropriation is *\$2,866,111 dollars less* than the State's 1991 funding effort.

For school year 2003-2004 (FY 2004) the state appropriated \$11,154,100. We are requesting to increase support to ***\$14,286,200***.

Joint Legislative Committee on Vocational and Technological Education  
POSSIBLE RECOMMENDATIONS

1. Recommend the State Board of Education change its minimum course study and competency requirements for graduation from high school to require all high school students take a vocational education course as part of their 8 ½ elective requirement.

**R7-2-302.04. Minimum Course of Study and Competency Requirements for Graduation from High School**

1. vi. One credit of fine arts ~~or~~ AND ONE CREDIT OF vocational education
2. Recommend the legislation to suspend  
A.R.S. 15-203 A13 (the statutory requirement that the Legislature not increase graduation requirements that will increase capital costs).
3. The State Board Administrative Rule requires one credit of fine art OR vocational education for high school graduation, but the Arizona Board of Regents (ABOR) only accepts the fine arts credit, so from the standpoint of graduating from high school to enter the university system, there is no benefit to a high school student to take a vocational course.  
Recommend that ABOR amend their policy and allow vocational course credits to be accepted.

Additional Recommendations-pulled from last meeting's minutes:

1. Recommend the Legislature's support of the mission statement and vision of the Career Technical Education Delivery System in Arizona.
2. Encourage Arizona schools to offer their students vocational and technological education courses that prepare them to enter the technology field and work at manufacturing plants.
3. Encourage school administrators to build awareness within their respective student bodies of the availability and benefits of vocational and technological education courses.
4. Encourage school counselors to educate their students about the availability and benefits of vocational and technological education.
5. Recommend that Arizona schools investigate the block-scheduling approach to teaching vocational and technological education.
6. Recommend the Tucson area school districts adopt secondary property taxes to create a technological district.

7. Recommend that vocational education courses qualify students for a science, math, English, etc. credit.
8. Recommend that vocational education courses be substituted for fine arts credits.
9. Recommend state regulations on graduation requirements that call for a flexibility of 3.5 credits that could cross over as vocational credits and be applied in a certain format for an English or math credit with some limitations.

Rep. Cajero Bedford's legislation: Add two more credits for high school students across the state except those who are college bound. Cost issues associated with that.

Senator Leff remarked that she'd rather see the Committee recommend full funding opportunities for people to be prepared for a career path.

Recommend increased access to vocational education courses for more students.

Current requirement for high school graduation is one credit hour, but it is either fine arts or vocational education course at the student's choice. Recommend that all Arizona high school students be required to take a vocational education course.